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August 23, 2005

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Re: Correction of Mistake in Printed Patent
Under §1480 of the Manual of Patent
Examining Procedures
U.S. Patent No.: 6,919,347
Date of Patent: July 19, 2005
Inventor(s): Ohlmeyer et al.
Our File No.: 1073.035A

Certificate
AUG 29 2005
of Correction

Dear Sir:

Upon proofreading the sealed patent, we noticed errors made by the Patent Office.

Transmitted herewith is a proposed Certificate of Correction effecting a corrective amendment.

The patentee respectfully solicits the granting of the requested Certificate of Correction.

Respectfully submitted,

Edward Timmer, Esq.
Registration No. 46,248
Attorney for Applicants

ET/cma
Enclosure

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. 6,919,347
DATED July 19, 2005
INVENTOR(S) Ohlmeyer et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

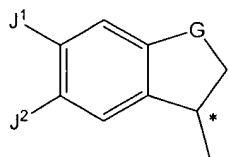
Claim 13

Col. 282, line 26, delete "A is $R^4R^5N-(O)-$;" and insert --A is $R^4R^5N-C(O)-$ --

Claim 14

Col. 283, lines 26 thru 32 structure

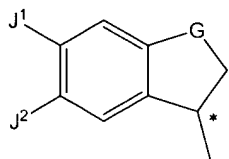
Delete current structure and replace with



Claim 15

Col. 284, lines 5 thru 10 structure

Delete current structure and replace with



Claim 16

Col. 284, line 28, delete "A¹ is R⁴R⁵N-C(O)-;" and insert --A¹ is R⁴R⁵N-C(O)-,--

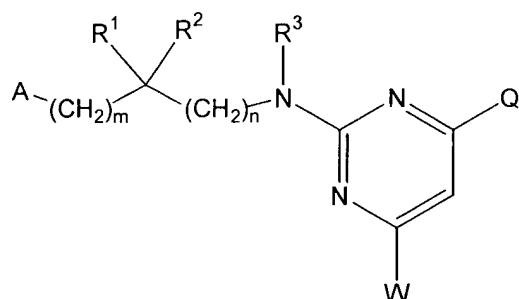
Claim 19

Col. 286, line 21, delete "C—C₃" in the second instance and insert —C₁—C₃

Claim 26

Col. 288, lines 3 thru 10 structure

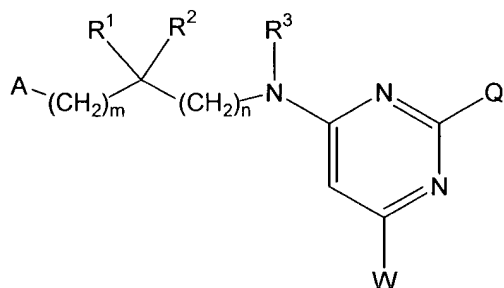
Delete current structure which has a "." after the letter "Q", and replace with



Claim 31

Col. 288, lines 57 thru 64

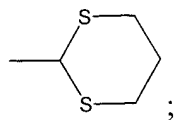
Delete current structure which has a "." after the letter "Q", and replace with



Claim 62

Col. 295, lines 41 thru 48

Delete current structure and replace with



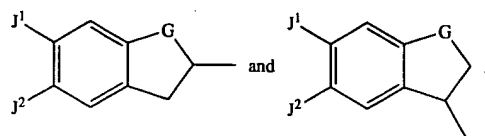
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PATENT NO.:

No. of add'l copies
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wherein J^1 and J^2 are independently chosen from H, F, Cl, CN, NO_2 and CH_3 , and G is chosen from $-\text{CH}_2-$, $-\text{CH}_2\text{CH}_2-$, $-\text{CH}_2\text{CH}_2\text{CH}_2-$, $-\text{OCH}_2-$, $-\text{CH}_2\text{O}-$, $-\text{CH}_2\text{CH}_2\text{O}-$, $-\text{OCH}_2\text{CH}_2-$, $-\text{O}-$, $-\text{N}(\text{lower alkyl})-$, $-\text{N}(\text{lower alkyl})\text{CH}_2-$, $-\text{CH}_2\text{N}(\text{lower alkyl})-$, $-\text{S}-$, $-\text{SO}-$, $-\text{SO}_2-$, $-\text{CH}_2\text{S}-$, $-\text{SCH}_2-$, $-\text{CH}_2\text{SO}-$, $-\text{SOCH}_2-$, $-\text{CH}_2\text{SO}_2-$, and $-\text{SO}_2\text{CH}_2-$;

R^5 is H or C_1-C_3 -alkyl, with the proviso that both R^3 and R^5 cannot be alkyl;

R^6 is aryl;

R^7 is aryl or C_1-C_3 -alkylaryl;

R^8 is chosen from alkyl, aryl, heteroaryl, substituted alkyl, C_1-C_4 -alkylaryl, C_1-C_4 -alkylheterocyclyl and C_1-C_4 -alkylheteroaryl;

R^9 is chosen from H, alkyl, alkenyl, substituted alkyl, cycloalkyl, aryl, alkoxy, heteroaryl, fluoroalkyl, C_1-C_4 -alkylcycloalkyl, $(\text{C}_1-\text{C}_4\text{-alkoxy})\text{alkyl}$, $(\text{C}_1-\text{C}_4\text{-alkoxycarbonyl})\text{alkyl}$, $(\text{C}_1-\text{C}_4\text{-alkylthio})\text{alkyl}$, heterocyclyl, C_1-C_4 -alkylheterocyclyl, C_1-C_4 -alkylaryl, and C_1-C_4 -alkylheteroaryl;

R^{10} is H or C_1-C_3 -alkyl; or

R^9 and R^{10} taken together may form a 5- to 7-membered ring structure optionally containing O, S, SO, SO_2 or NR^{12} , said ring optionally substituted with $-\text{OH}$, CN, $-\text{COOH}$ or $-\text{COOCH}_3$;

R^{11} is aryl;

R^{12} is chosen from H, C_1-C_3 -alkyl, alkoxycarbonyl, methoxyacetyl and aryl;

R^{13} is chosen from $-\text{OH}$, $-\text{OTHP}$, 1-imidazolyl, and 1-pyrrolyl;

m is zero or one; and

n is zero or one, with the proviso that when A is A^2 , m and n cannot both be zero.

10. A 2-pyrimidinamine according to claim 9 wherein Q is chosen from imidazolyl, pyrrolyl, pyridinyl, fluorophenyl and 2-thienyl.

11. A 2-pyrimidinamine according to claim 10 wherein A is $\text{R}^4\text{R}^5\text{N}-\text{C}(\text{O})-$;

W is H, Cl, NHR^9 or OR^8 ;

R^1 is chosen from alkyl and C_1-C_3 -alkylcycloalkyl;

R^2 , R^3 and R^5 are H;

R^4 is C_1-C_4 -alkylaryl or C_1-C_4 -alkylheteroaryl;

R^8 is C_1-C_4 -alkylaryl;

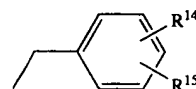
R^9 is chosen from hydrogen, alkyl, fluoroalkyl, $(\text{C}_1-\text{C}_4\text{-alkoxy})\text{alkyl}$, $(\text{C}_1-\text{C}_4\text{-alkylthio})\text{alkyl}$, C_1-C_4 -alkylcycloalkyl, C_1-C_4 -alkylaryl, heterocyclyl, C_1-C_4 -alkylheteroaryl, C_1-C_4 -alkylheterocyclyl; and

m and n are zero.

12. A 2-pyrimidinamine according to claim 11 wherein W is NHR^9 and

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R^9 is

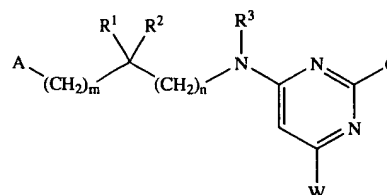


wherein

R^{14} is chosen from H, F, Cl, CN, NO_2 , SO_2NH_2 , CF_3 , COOCH_3 , OCH_3 , SO_2CH_3 , $\text{N}(\text{CH}_3)_2$ and COOH ; and

R^{15} is chosen from H, OCH_3 and Cl.

13. A compound of formula



wherein:

A is $\text{R}^4\text{R}^5\text{N}-\text{C}(\text{O})-$;

Q is chosen from imidazolyl and pyrrolyl;

W is NHR^9 ;

R^1 is chosen from cyclohexylmethyl; 2-methylpropyl and 3-methyl-1-butyl;

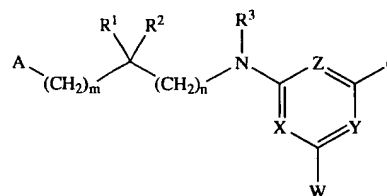
R^2 , R^3 and R^5 are H;

R^4 and R^9 are benzyl or substituted benzyl;

m is zero; and

n is zero.

14. A compound of formula

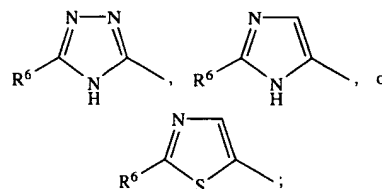


wherein:

two of X, Y and Z are N and the other of X, Y and Z is CH;

A is A^1 or A^2 ;

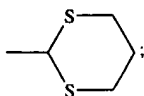
A^1 is $\text{R}^4\text{R}^5\text{N}-\text{C}(\text{O})-$,



A^2 is chosen from $\text{R}^7\text{C}(\text{O})\text{NH}-$, $\text{R}^7\text{S}(\text{O})_2\text{NH}-$, $\text{R}^4\text{NH}-$, and $\text{R}^4\text{O}-$;

Q is chosen from heteroaryl, aryl, $-\text{CH}_2\text{R}^{13}$, $-\text{CH}=\text{N}-\text{OCH}_3$ and

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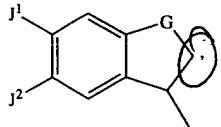
W is chosen from H, Cl, F, R⁸, C₁-C₄-alkylaryl, —OR⁸, —SR⁸, —NR⁹R¹⁰ and —NHC(O)R¹¹, with the proviso that when Q is imidazolyl, W is not H, Cl, F or R⁸;

R¹ is chosen from alkyl, cycloalkyl, alkenyl, C₁-C₃-alkylcycloalkyl, heterocyclyl, C₁-C₃-alkylheterocyclyl, aryl, C₁-C₃-alkylaryl, heteroaryl, C₁-C₃-alkylheteroaryl, (C₁-C₃-alkyloxy)alkyl, (C₁-C₃-alkyloxy)cycloalkyl, (C₁-C₃-alkylthio)alkyl, (C₁-C₃-alkylthio)cycloalkyl and (C₁-C₃-alkylsulfonyl)alkyl;

R² is H or C₁-C₃-alkyl, or R¹ and R² taken together form a 5- to 7-membered ring structure optionally containing O, S or NR¹²;

R³ is H or C₁-C₆-alkyl, or, when n is zero, R² and R³ taken together may form a 6-membered ring, which may be fused to a six-membered saturated or aromatic carbocycle;

R⁴ is



having the R configuration at the carbon indicated with an asterisk, wherein J¹ and J² are independently chosen from H, F, Cl, CN, NO₂ and CH₃, and G is chosen from —CH₂—, —CH₂CH₂—, —CH₂CH₂CH₂—, —OCH₂—, —CH₂O—, —CH₂CH₂O—, —OCH₂CH₂—, —O—, —N(lower alkyl)—, —N(lower alkyl)CH₂—, —CH₂N(lower alkyl)—, —S—, —SO—, —SO₂—, —CH₂S—, —SCH₂—, —CH₂SO—, —SOCH₂—, —CH₂SO₂—, and —SO₂CH₂—;

R⁵ is H or C₁-C₃-alkyl, with the proviso that both R³ and R⁵ cannot be alkyl;

R⁶ is aryl;

R⁷ is aryl or C₁-C₃-alkylaryl;

R⁸ is chosen from alkyl, aryl, heteroaryl, substituted alkyl, C₁-C₄-alkylaryl, C₁-C₄-alkylheterocyclyl and C₁-C₄-alkylheteroaryl;

R⁹ is chosen from H, alkyl, alkenyl, substituted alkyl, cycloalkyl, aryl, alkoxy, heteroaryl, fluoroalkyl, C₁-C₄-alkylcycloalkyl, (C₁-C₄-alkoxy)alkyl, (C₁-C₄-alkoxycarbonyl)alkyl, (C₁-C₄-alkylthio)alkyl, heterocyclyl, C₁-C₄-alkylheterocyclyl, C₁-C₄-alkylaryl, and C₁-C₄-alkylheteroaryl;

R¹⁰ is H or C₁-C₃-alkyl; or

R⁹ and R¹⁰ taken together may form a 5- to 7-membered ring structure optionally containing O, S, SO, SO₂ or NR¹², said ring optionally substituted with —OH, —CN, —COOH or —COOCH₃;

R¹¹ is aryl;

R¹² is chosen from H, C₁-C₃-alkyl, alkoxycarbonyl, methoxyacetyl and aryl;

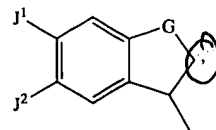
R¹³ is chosen from —OH, —OTHP, 1-imidazolyl, and 1-pyrrolyl;

m is zero or one; and

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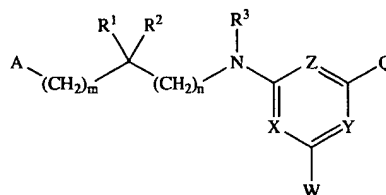
n is zero or one, with the proviso that when A is A², m and n cannot both be zero.

15. A pyrimidine according to claim 9 wherein R⁴ is



having the R configuration at the carbon indicated with an asterisk.

16. A compound of formula

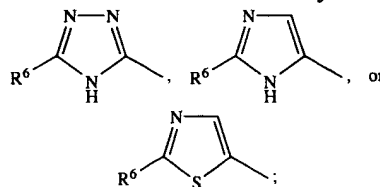


wherein:

two of X, Y and Z are N and the other of X, Y and Z is CH;

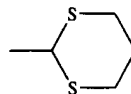
A is A¹ or A²;

A¹ is R⁴R⁵N—C(O)—;



A² is chosen from R⁷C(O)NH—, R⁷S(O)₂NH—, R⁴NH—, and R⁴O—;

Q is chosen from aryl, —CH₂R¹³, —CH=N—OCH₃ and



heteroaryl other than 1-imidazolyl and 1-triazolyl;

W is chosen from H, Cl, F, R⁸, C₁-C₄-alkylaryl, —OR⁸, —SR⁸, —NR⁹R¹⁰ and —NHC(O)R¹¹, with the proviso that when Q is imidazolyl, W is not H, Cl, F or R⁸;

R¹ is chosen from alkyl, cycloalkyl, alkenyl, C₁-C₃-alkylcycloalkyl, heterocyclyl, C₁-C₃-alkylheterocyclyl, aryl, C₁-C₃-alkylaryl, heteroaryl, C₁-C₃-alkylheteroaryl, (C₁-C₃-alkyloxy)alkyl, (C₁-C₃-alkyloxy)cycloalkyl, (C₁-C₃-alkylthio)alkyl, (C₁-C₃-alkylthio)cycloalkyl and (C₁-C₃-alkylsulfonyl)alkyl;

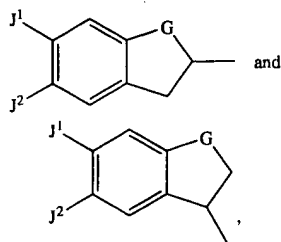
R² is H or C₁-C₃-alkyl, or R¹ and R² taken together form a 5- to 7-membered ring structure optionally containing O, S or NR¹²;

R³ is H or C₁-C₆-alkyl, or, when n is zero, R² and R³ taken together may form a 6-membered ring, which may be fused to a six-membered saturated or aromatic carbocycle;

R⁴ is chosen from H, aryl, heteroaryl, C₁-C₄-alkyl substituted with from one to three aryl or heteroaryl

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residues,



wherein J¹ and J² are independently chosen from H, F, Cl, CN, NO₂ and CH₃, and G is chosen from —CH₂—, —CH₂CH₂—, —CH₂CH₂CH₂—, —OCH₂—, CH₂O—, —CH₂CH₂O—, —OCH₂CH₂—, —O—, —N(lower alkyl)—, —N(lower alkyl)CH₂—, —CH₂N(lower alkyl)—, —S—, —SO—, —SO₂—, —CH₂S—, —SCH₂—, —CH₂SO—, —SOCH₂—, —CH₂SO₂—, and —SO₂CH₂—;

R⁵ is H or C₁–C₃-alkyl, with the proviso that both R³ and R⁵ cannot be alkyl;

R⁶ is aryl;

R⁷ is aryl or C₁–C₃-alkylaryl;

R⁸ is chosen from alkyl, aryl, heteroaryl, substituted alkyl, C₁–C₄-alkylaryl, C₁–C₄-alkylheterocyclyl and C₁–C₄-alkylheteroaryl;

R⁹ is chosen from H, alkyl, alkenyl, substituted alkyl, cycloalkyl, aryl, alkoxy, heteroaryl, fluoroalkyl, C₁–C₄-alkylcycloalkyl, (C₁–C₄-alkoxy)alkyl, (C₁–C₄-alkoxycarbonyl)alkyl, (C₁–C₄-alkylthio)alkyl, heterocyclyl, C₁–C₄-alkylheterocyclyl, C₁–C₄-alkylaryl, and C₁–C₄-alkylheteroaryl;

R¹⁰ is H or C₁–C₃-alkyl, or

R⁹ and R¹⁰ taken together may form a 5- to 7-membered ring structure optionally containing O, S, SO, SO₂ or NR¹², said ring optionally substituted with —OH, —CN, —COOH or —COOCH₃;

R¹¹ is aryl;

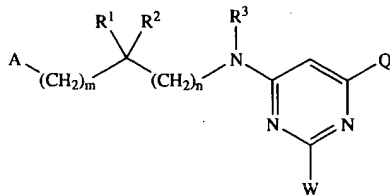
R¹² is chosen from H, C₁–C₃-alkyl, alkoxycarbonyl, methoxyacetyl and aryl;

R¹³ is chosen from —OH, —OTHP, 1-imidazolyl, and 1-pyrrolyl;

m is zero or one; and

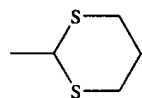
n is zero or one, with the proviso that when A is A², m and n cannot both be zero.

17. A 4-pyrimidinamine according to claim 16, wherein Z is CH, having the formula



18. A 4-pyrimidinamine according to claim 17 wherein Q is chosen from methylimidazolyl, pyrrolyl, methylpyrrolyl, pyrazolyl, methylpyrazolyl, furanyl, methylfuranyl, thienyl, oxazolyl, thiazolyl, pyridinyl, phenyl, fluorophenyl, 1-methylpyrimidin-2-onyl, phenyl, fluorophenyl, hydroxymethyl, 2-imidazolyl, tetrahydropyran-2-oxymethyl, imidazolylmethyl, pyrrolylmethyl, —CH=N—OCH₃ and

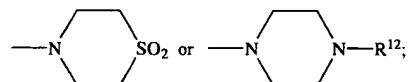
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19. A 4-pyrimidinamine according to claim 18 wherein: Q is chosen from pyrrol-1-yl, imidazol-1-yl, furan-3-yl, 2-methylimidazol-1-yl and 4-methylimidazol-1-yl;

A is R⁴R⁵N—C(O)—;

W is Cl, NRH⁹, N(CH₃)R⁹, OR⁸, SR⁸, R⁸, morpholin-4-yl,



R¹ is chosen from alkyl, cycloalkyl, C₁–C₃-alkylaryl, C₁–C₃-alkylcycloalkyl, C—C₃-alkylheterocyclyl, C₁–C₃-alkylheteroaryl;

R², R³ and R⁵ are H;

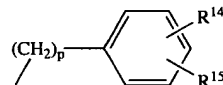
R⁸ is C₁–C₄-alkylaryl;

R⁹ is chosen from hydrogen, alkyl, substituted alkyl, (C₁–C₄)-alkoxy, C₁–C₄-alkylcycloalkyl, C₁–C₄-alkylaryl, heterocyclyl, C₁–C₄-alkylheteroaryl, C₁–C₄-alkylheterocyclyl; and

m and n are zero.

20. A 4-pyrimidinamine according to claim 19 wherein W is NHR⁹ and

R⁹ is chosen from hydrogen; methyl; ethyl; 2,2,2-trifluoroethyl; allyl; cyclopropyl; 2-cyanoethyl; propargyl; methoxy; methoxyethyl; cyclopropyl; cyclopropylmethyl; (methylthio)ethyl; 3-methoxypropyl; 3-pyridyl; 2-(3-pyridyl)ethyl; 2-(2-pyridyl)ethyl; 3-pyridylmethyl; 4-pyridylmethyl; 4-pyridylmethyl-N-oxide; 2-pyridazinylmethyl; sulfolan-3-yl; 3-tetrahydrofuran-2-yl; 2-tetrahydrofuran-3-yl; 3-(1-imidazolyl)propyl; 1-t-butoxycarbonyl-4-piperidinyl; 1-t-butoxycarbonyl-4-piperidinylmethyl; 2-(hydroxyimino)propyl; 2-(methoxyimino)propyl; 2-oxo-1-propyl; and



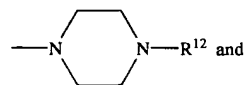
wherein

R¹⁴ is chosen from H, Cl, F, CN, NO₂, SO₂NH₂, CF₃, COOCH₃, OCH₃, OH, SO₂CH₃, N(CH₃)₂ and COOH;

R¹⁵ is chosen from H, OCH₃ and Cl; and

p is 1 or 2.

21. A 4-pyrimidinamine according to claim 19 wherein W is

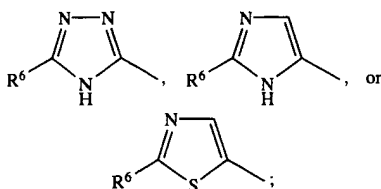


R¹² is t-butoxycarbonyl, methoxyacetyl or phenyl.

22. A 4-pyrimidinamine according to claim 16 wherein Z is CH;

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A is



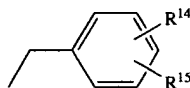
R^1 is chosen from n-butyl; cyclohexylmethyl; cyclopentylmethyl; 2-methylpropyl; 3-methyl-1-butyl; cyclohexyl; 2,2-dimethylpropyl; benzyl; 2-thienylmethyl; 1-t-butoxycarbonyl-4-piperidyl; 4-chlorobenzyl; 2-pyranylmethyl; 4-pyranylmethyl; 4-pyranyl and 1,1-dimethylethyl;

R^2 and R^3 are H;

Q is pyrrolyl;

W is NHR^9 ; and

R^9 is alkyl, cycloalkyl or



wherein

R^{14} is chosen from H, Cl, F, CN, NO_2 , SO_2NH_2 , CF_3 , $COOCH_3$, OCH_3 , SO_2CH_3 , $N(CH_3)_2$ and $COOH$; and R^{15} is chosen from H, OCH_3 and Cl.

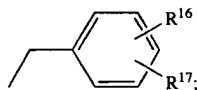
23. A pyrimidine according to claim 16 wherein:

A is $R^4R^5N-C(O)-$;

R^1 is chosen from isopropyl; n-butyl; cyclohexylmethyl; cyclopentylmethyl; naphthylmethyl; cyclohexylethyl; 2-methylpropyl; 3-methyl-1-butyl; cyclohexyl; 2,2-dimethylpropyl; benzyl; 2-thienylmethyl; 1-t-butoxycarbonyl-4-piperidyl; 4-methoxybenzyl; 4-chlorobenzyl; 3,4-dichlorobenzyl; 2-pyranylmethyl; 4-pyranylmethyl; 4-pyranyl and 1,1-dimethylethyl;

R^2 , R^3 and R^5 are H;

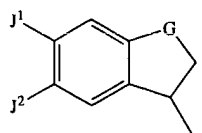
R^4 is pyridinyl, pyridinylmethyl, indanylmethyl, furanylmethyl, tetrahydronaphthalenyl, substituted phenyl, or



R^{16} is chosen from H, Cl, F, CN, NO_2 , SO_2NH_2 , CF_3 , CH_3 , $COOCH_3$, OCH_3 , SO_2CH_3 , $N(CH_3)_2$ and $COOH$; and

R^{17} is chosen from H, OCH_3 , F and Cl.

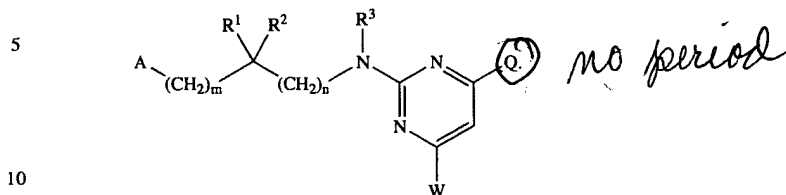
24. A pyrimidine according to claim 16 wherein R^4 is



25. A pyrimidine according to claim 24, wherein one of J^1 and J^2 is H and the other is H, Cl or CN and G is chosen from $-CH_2-$, $-CH_2CH_2-$, $-OCH_2-$, $-O-$ and $-CH_2N$ (lower alkyl)-.

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26. A 2-pyrimidinamine according to claim 16, wherein Y is CH, having the formula



27. A 2-pyrimidinamine according to claim 26 wherein Q is chosen from pyrrolyl, pyridinyl, fluorophenyl and 2-thienyl.

28. A 2-pyrimidinamine according to claim 27 wherein A is $R^4R^5N-C(O)-$;

W is H, Cl, NHR^9 or OR^8 ;

R^1 is chosen from alkyl and C_1-C_3 -alkylcycloalkyl;

R^2 , R^3 and R^5 are H;

R^4 is C_1-C_4 -alkylaryl or C_1-C_4 -alkylheteroaryl;

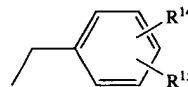
R^8 is C_1-C_4 -alkylaryl;

R^9 is chosen from hydrogen, alkyl, fluoroalkyl, $(C_1-C_4$ -alkoxy)alkyl, $(C_1-C_4$ -alkylthio)alkyl, C_1-C_4 -alkylcycloalkyl, C_1-C_4 -alkylaryl, heterocyclyl, C_1-C_4 -alkylheteroaryl, C_1-C_4 -alkylheterocyclyl; and

m and n are zero.

29. A 2-pyrimidinamine according to claim 28 wherein W is NHR^9 and

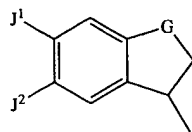
R^9 is



wherein

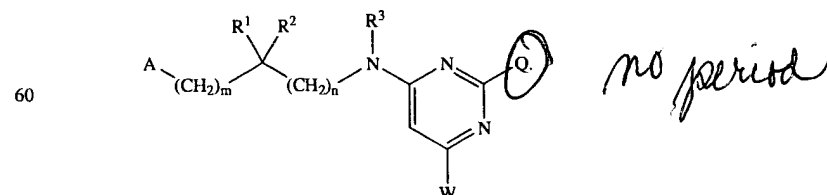
R^{14} is chosen from H, F, Cl, CN, NO_2 , SO_2NH_2 , CF_3 , $COOCH_3$, OCH_3 , SO_2CH_3 , $N(CH_3)_2$ and $COOH$; and R^{15} is chosen from H, OCH_3 and Cl.

30. A 2-pyrimidinamine according to claim 26 wherein R^4 is



one of J^1 and J^2 is H and the other is H, Cl or CN and G is chosen from $-CH_2-$, $-CH_2CH_2-$, $-OCH_2-$, $-O-$ and $-CH_2N$ (lower alkyl)-.

31. A 4-pyrimidinamine according to claim 16, wherein X is CH, having the formula



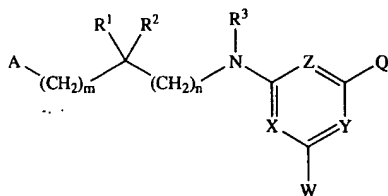
32. A 4-pyrimidinamine according to claim 31 wherein Q is pyrrolyl and m and n are zero.

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60. The method of treating pain or hyperalgesia according to claim 59 wherein said cyclooxygenase inhibitor is a selective cyclooxygenase-2 inhibitor.

61. The method of treating pain or hyperalgesia according to claim 59 wherein said cyclooxygenase inhibitor is a selective cyclooxygenase-1 inhibitor.

62. A method of treating post-capillary resistance or diabetic symptoms associated with insulinitis comprising administering to a subject in need of such treatment a therapeutically effective amount of a compound of formula I

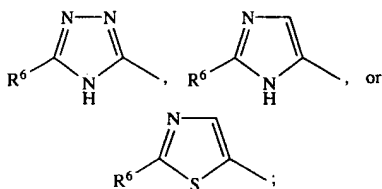


wherein:

two of X, Y and Z are N and the other of X, Y and Z is CH;

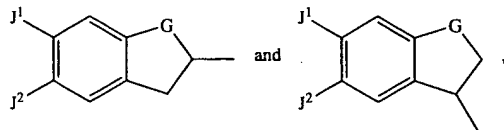
A is A¹ or A²;

A¹ is R⁴R⁵N—(O)—,



A² is chosen from R⁷C(O)NH—, R⁷S(O)₂NH—, R⁴NH—, and R⁴O—;

Q is chosen from heteroaryl, aryl, —CH₂R¹³, —CH=N—OCH₃ and



W is chosen from H, Cl, F, R⁸, C₁–C₄-alkylaryl, —OR⁸, —SR⁸, —NR⁹R¹⁰ and —NHC(O)R¹¹, with the proviso that when Q is imidazolyl, W is not H, Cl, F or R⁸;

R¹ is chosen from alkyl, cycloalkyl, alkenyl, C₁–C₃-alkylcycloalkyl, heterocyclyl, C₁–C₃-alkylheterocyclyl, aryl, C₁–C₃-alkylaryl, heteroaryl, C₁–C₃-alkylheteroaryl, (C₁–C₃-alkyloxy)alkyl, (C₁–C₃-alkyloxy)cycloalkyl, (C₁–C₃-alkylthio)alkyl, (C₁–C₃-alkylthio)cycloalkyl and (C₁–C₃-alkylsulfonyl)alkyl;

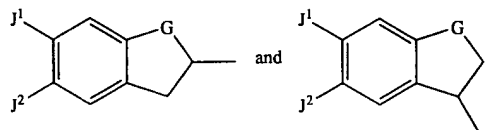
R² is H or C₁–C₃-alkyl, or R¹ and R² taken together form a 5- to 7-membered ring structure optionally containing O, S or NR¹²;

R³ is H or C₁–C₆-alkyl, or, when n is zero, R² and R³ taken together may form a 6-membered ring, which may be fused to a six-membered saturated or aromatic carbocycle;

R⁴ is chosen from H, aryl, heteroaryl, C₁–C₄-alkyl substituted with from one to three aryl or heteroaryl

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residues,



wherein J¹ and J² are independently chosen from H, F, Cl, CN, NO₂ and CH₃ and G is chosen from —CH₂—, —CH₂CH₂—, —CH₂CH₂CH₂—, —OCH₂—, —CH₂O—, —CH₂CH₂O—, —OCH₂CH₂—, —O—, —N(lower alkyl)—, —N(lower alkyl)CH₂—, —CH₂N(lower alkyl)—, —S—, —SO—, —SO₂—, —CH₂S—, —SCH₂—, —CH₂SO—, —SOCH₂—, —CH₂SO₂—, and —SO₂CH₂—;

R⁵ is H or C₁–C₃-alkyl, with the proviso that both R³ and R⁵ cannot be alkyl;

R⁶ is aryl;

R⁷ is aryl or C₁–C₃-alkylaryl;

R⁸ is chosen from alkyl, aryl, heteroaryl, substituted alkyl, C₁–C₄-alkylaryl, C₁–C₄-alkylheterocyclyl and C₁–C₄-alkylheteroaryl;

R⁹ is chosen from H, alkyl, alkenyl, substituted alkyl, cycloalkyl, aryl, alkoxy, heteroaryl, fluoroalkyl, C₁–C₄-alkylcycloalkyl, (C₁–C₄-alkoxy)alkyl, (C₁–C₄-alkoxycarbonyl)alkyl, (C₁–C₄-alkylthio)alkyl, heterocyclyl, C₁–C₄-alkylheterocyclyl, C₁–C₄-alkylaryl, and C₁–C₄-alkylheteroaryl;

R¹⁰ is H or C₁–C₃-alkyl; or

R⁹ and R¹⁰ taken together may form a 5- to 7-membered ring structure optionally containing O, S, SO, SO₂ or NR¹², said ring optionally substituted with —OH, —CN, —COOH or —COOCH₃;

R¹¹ is aryl;

R¹² is chosen from H, C₁–C₃-alkyl, alkoxycarbonyl, methoxyacetyl and aryl;

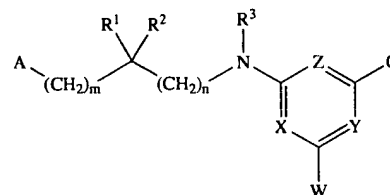
R¹³ is chosen from —OH, —OTHP, 1-imidazolyl, and 1-pyrrolyl;

m is zero or one; and

n is zero or one, with the proviso that when A is A², m and n cannot both be zero.

63. The method according to claim 62 wherein said diabetic symptoms associated with insulinitis comprise hyperglycemia, diuresis, proteinuria and increased nitrile and kallikrein urinary excretion.

64. A method of treating edema comprising administering to a subject in need of such treatment a therapeutically effective amount of a compound of formula I



wherein:

two of X, Y and Z are N and the other of X, Y and Z is CH;

A is A¹ or A²;